

Remarks

Claims 1-3, 5-32, 36, 37, 39, 69-74 and 77 are pending. Claims 4, 33-35, 38, 40-68, 75 and 76 were previously cancelled. Claims 28-31, 39, and 70-74 stand withdrawn. Claims 1-3, 5-27, 32, 36, 37, 69 and 77 are subject to examination. Reconsideration is requested in view of following remarks.

Response to 102 Rejections

Claims 1 and 3 have been rejected as allegedly anticipated by Zhong *et al.*, *J. Chem. Res., Synopses*, **2000**, 12, 588-589. Claims 1-3, 5, 6, 8-13, 15, 16, 18, 19 and 77 have been rejected as allegedly anticipated by Schwan *et al.*, *J. Org. Chem.*, **1998**, 63(22) 7825-2832 (“Schwan, *J. Org. Chem.*”). Claims 1, 5, 6, 8-11, 15, 18 and 77 have been rejected as allegedly anticipated by Schwan *et al.*, *Tetrahedron Letters*, **1996**, 37(14), 2345-8 (“Schwan, *Tetrahedron Letters*”). The rejection maintains that the aforesaid references disclose the compounds reproduced at pages 4 and 5 of the Office Action. The rejection maintains that the reference compounds are within the scope of applicants’ claims.

Neither Zhong *et al.*, Schwan, *J. Org. Chem.*, nor Schwan, *Tetrahedron Letters* disclose compounds falling within the scope of applicants’ claims. In each prior art compound set forth in the office action, the ring corresponding to applicants ring B¹ is represented as “Ph”, which is *unsubstituted phenyl*. According to claim 1, when ring B¹ is aryl, it must be *substituted aryl*. This is because when B¹ is aryl, its attached R^b substituent is selected from a group that does not include hydrogen. This is clear from the following definition of R^b in claim 1, when R^b is attached to aryl:

“each R^b attached to aryl is independently selected from the group consisting of -C(=O)R², halogen, -NO₂, -CN, -OR², -C(=O)OR², -NR²₂, (C₁-C₆)haloalkyl and (C₁-C₆)haloalkoxy”.

Also, when ring B¹ is aryl, the value of y in the expression “(R^b)_y” in Formula IA in claim 1 can not be zero, but is selected from 1, 2, 3, 4 or 5. This further prevents claim 1 from reading on unsubstituted phenyl as ring B¹.

Accordingly, none of claims 1-3, 5, 6, 8-13, 15, 16, 18, 19 and 77 are anticipated by Zhong *et al.*, Schwan, *J. Org. Chem.*, or Schwan, *Tetrahedron Letters*.

Response to 103 Rejection

Claims 1-3, 5-27, 32, 36, 37, 69 and 77 remain rejected under 35 U.S.C. 103 over Schwan, *J. Org. Chem.* The rejection alleges that applicants claim compounds wherein an aryl ring is substituted with a methyl group while the prior art teaches compounds “substituted” with hydrogen. The rejection alleges that compounds that differ by methyl and hydrogen are expected to possess similar chemical and physical properties.

Applicants vigorously dispute Examiner’s assertion of the universal equivalence of hydrogen and methyl. However, the point is moot since the claimed compounds, in pertinent part, do not cover methyl substitution. As indicated above, the ring in Schwan, *J. Org. Chem* corresponding to applicants ring B¹ is unsubstituted phenyl. When applicants’ ring B¹ is aryl, the R^b substituent on that ring is defined in claim 1 as “independently selected from the group consisting of -C(=O)R², halogen, -NO₂, -CN, -OR², -C(=O)OR², -NR², (C₁-C₆)haloalkyl and (C₁-C₆)haloalkoxy”.

Alkyl is plainly absent from the above definition of R^b. Thus, contrary to the assertion in the Office Action, the claims do not embrace methyl-substituted aryl for ring B¹, and the claims are not obvious over Schwan, *J. Org. Chem.*

Response to Obviousness-Type Double Patenting Rejection

Claims 1-3, 5-27, 32, 36, 37, 69 and 77 remain provisionally rejected under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1-6, 8, 94-95, 97-117, 122, 128 and 130-132 of co-pending U.S. Application No. 10/592,604. Without acquiescing in the rejection, applicant notes that the rejection is provisional, since the allegedly conflicting claims in the ’604 application have not been patented.

For the convenience of the Examiner, the following is the status of the ’604 application. A final office action was mailed March 18, 2009. Applicants filed a response on July 22, 2009. A non-final office action then issued on September 28, 2009.

Since the instant application is the earlier-filed application, no response is required at this time. MPEP 1490.V.D.

Request for Rejoinder of Claims 28-31, 39 and 70-71

Withdrawn claims 28-31 and 39 are directed to conjugates of compounds of claim 10 (claims 28-30), pharmaceutical compositions thereof (claim 31) and methods of treating breast, prostate, lung and colorectal cancer by administration of those conjugates (claim 39). Claims 28-31 and 39 thus directed to non-elected inventions that depend from or otherwise require all the limitations of an allowable claim to an elected invention, namely claim 10.

Accordingly, rejoinder and allowance of claims 28-31 and 39 is requested pursuant to MPEP 821.04(a).

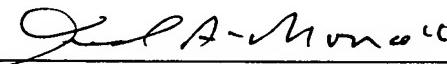
Withdrawn claims 70 and 71 depend from claim 69. The only basis for rejection of claim 69 has been overcome, as discussed above. Rejoinder and allowance of claims 70 and 71 is requested, since claims 70 and 71 depend from claim 69. MPEP 821.04(a).

Conclusion

Applicants respectfully submit that the application is in condition for allowance. An early action toward that end is earnestly solicited.

Respectfully submitted,

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